

NRG Montville Operations Inc. Montville Generating Station 74 Lathrop Road Uncasville, CT 06382

Main Phone # 860.848,9248 Fax # 860.848.6006

September 30, 2015

Ms. Jessica Stefanowicz Connecticut Department of Energy and Environmental Protection 79 Elm Street Hartford, Connecticut 06106

Subject: Semi-Annual Site Status Update

Montville Generating Station, Montville Power LLC Montville, CT

Dear Ms. Stefanowicz:

Montville Power LLC is submitting the enclosed Semi-Annual Site Status Update for the Montville Generating Station in Montville, Connecticut. This report provides a site status update for the period of January through June 2015.

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

Should you have any questions or require further information, please call Mr. Ian Cambridge, at (860) 848-6017.

Thank you,

Marsal Martin Site Manager

Montville Power LLC

Enclosure(s)

cc: William Warzecha, CTDEEP (e-copy only)

Juan Perez, USEPA (e-copy only) Bob Spooner, NRG (e-copy only)

Ian Cambridge, NRG Montville (hard copy and e-copy)

Andrew D. Walker, LEP, CB&I (e-copy only)

File (hard copy and e-copy)



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October 1, 2015 Project #: 1009644013.00121110

Ms. Jessica Stefanowicz Connecticut Department of Energy and Environmental Protection 79 Elm Street Hartford, Connecticut 06106

Subject: Semi-Annual Site Status Update

Montville Generating Station Montville, Connecticut

Dear Ms. Stefanowicz:

On behalf of Montville Power LLC (Montville Power) and its parent company, NRG Energy, Inc. (NRG), CB&I Environmental and Infrastructure, Inc. (CB&I) has prepared this letter to provide a semi-annual site status update for the subject site. A Site Plan is provided as **Figure 1**. In addition, CB&I is providing the Connecticut Department of Energy & Environmental Protection (CTDEEP) with the schedule for continuing environmental activities at the site. This report covers the period of January through June 2015.

GROUNDWATER MONITORING - MAY 2015

Groundwater Sampling

Groundwater monitoring during this reporting period was conducted on May 27 and 28, 2015 at the locations and for the parameters listed in the table below. During the May 2015 event, groundwater samples were collected from existing wells to monitor groundwater concentration trends of metals and to assess compliance with applicable criteria.

Sample Location	Analysis
AOC3-SB1-MW1	select metals
AOC3-SB4-MW2	select metals
AOC12-MW301	select metals
AOC12-MW305	select metals
AOC12-MW306	select metals
NRG-MW3	select metals
NRG-MW5	select metals
NRG-MW7	select metals

Notes: Select metals include As, Be, Cu, Ni, V, and Zn by EPA Method 6010

During the May 2015 sampling event, depth to groundwater was measured at each of the monitoring wells using an electronic interface probe (IP). The IP used detects water and light non-aqueous phase

liquid (LNAPL), if present, to within accuracy of 0.01 foot. LNAPL was not detected in monitoring wells gauged during this event, which is consistent with previous results. Results of water level monitoring from the May 2015 sampling event are summarized in **Table 1**.

During the May 2015 sampling event CB&I collected groundwater samples from the monitoring wells (with the exception of NRG-MW3) using a modified low flow sampling technique. Well locations are shown on **Figure 1**. Each well was pumped at a rate that produced little or no draw down while parameters including temperature, pH, oxidation reduction potential (ORP), dissolved oxygen (DO) and conductivity were monitored. Groundwater samples were then collected after the parameters stabilized to ensure that the each sample was representative of local aquifer conditions. CB&I collected groundwater samples from monitoring well NRG-MW3 using a purge and recharge approach due to low water levels. Based upon previous exceedances of the Remediation Standard Regulations (RSR) criteria in groundwater samples collected at the site, groundwater samples were submitted to Accutest Laboratories of Marlborough, Massachusetts for analysis of select total metals including arsenic, beryllium, copper, nickel, vanadium, and zinc. The complete laboratory analytical report for the May 2015 sampling event is included in **Attachment 1**.

Groundwater Results

Groundwater analytical results from the May 2015 sampling event are summarized in **Table 2** (GA groundwater area monitoring wells) and **Table 3** (GB groundwater area monitoring wells). As appropriate, **Tables 2** and **3** compare groundwater analytical results to the Surface Water Protection Criteria (SWPC), Additional SWPC (vanadium), Alternative SWPC (arsenic, beryllium, copper, and zinc), and groundwater protection criteria (GWPC). CTDEEP approved the Additional and Alternative SWPC for the subject site in their March 13, 2013 letter (CTDEEP, 2013).

The groundwater data from several previous rounds of sampling have indicated that there is little difference between dissolved and total metals concentrations in groundwater at the Montville site (Shaw, 2010). Therefore, at appropriate wells, such as NRG-MW-5, comparison of total metals concentrations to the Water Quality Criteria (WQC) is appropriate to evaluate potential impact to the Bartlett Cove area. This comparison is presented in **Table 4**, and includes both freshwater and saltwater criteria.

The data for May 2015 are presented in **Tables 2, 3,** and **4** indicate the following:

- Concentrations of arsenic detected range from 2.9 micrograms per liter (ug/l) at AOC12-MW-301 to 335 micrograms per liter (ug/l) at AOC3-SB1-MW-1. The concentrations of arsenic detected in May 2015 exceeded the Alternative SWPC (10 ug/l) at four of the eight wells that were sampled.
- Concentrations of beryllium detected ranged from below the detection limit at several wells to 21.9 ug/l at AOC3-SB1-MW-1. The concentrations of beryllium detected in May 2015 exceeded the appropriate SWCP (20 ug/l) at one of the five wells where it was detected.
- Concentrations of copper detected ranged from below the detection limit at several wells to 1,240 ug/l at AOC3-SB1-MW-1. Excluding AOC3-SB1-MW-1, detected concentrations of copper in the May 2015 sampling event were below the appropriate SWPC.
- Concentrations of nickel detected ranged from 1.5 ug/l at AOC3-SB4-MW-2 to 1,040 ug/l at well AOC3-SB1-MW1. Detected concentrations of nickel exceeded the appropriate SWPC (880 ug/l) in one sample collected during the May 2015 monitoring event.

- Concentrations of vanadium detected ranged from below the detection limit at one well to 1,030 ug/l at well AOC3-SB1-MW1. Detected concentrations of vanadium in the May 2015 sampling event were below the appropriate SWPC. A concentration of 66.3 ug/l was reported at NRG-MW-03, exceeding the GWPC of 50 ug/l.
- Concentrations of zinc detected ranged from below the detection limit at four wells to 1,490 ug/l at well AOC3-SB1-MW1. Detected concentrations of zinc in the May 2015 sampling event were below the appropriate SWPC.
- At monitoring well NRG-MW5, where comparison to the WQC is appropriate, the concentration of nickel detected in the groundwater sample from May 2015 exceeded the chronic saltwater criteria (**Table 4**). The remaining metals were reported at concentrations below the WQC.

The concentrations of metals detected in groundwater samples collected during this reporting period are generally consistent with previous results with the exception of wells AOC3-SB1-MW1 and NRG-MW3. At well AOC3-SB1-MW1, most target metals were detected at higher concentrations in May 2015 when compared to data from 2013 and 2014. For example, zinc was detected at 1,490 ug/l in May 2015 and averaged approximately 336 ug/l over the three sampling events in 2014. The higher levels of metals at well AOC3-SB1-MW1 during the May 2015 groundwater sampling event appear to be the result of an elevated turbidity. A low water table was observed at this well in May 2015 and even using a low pumping rate well AOC3-SB1-MW1 went dry twice during sampling. This resulted in an elevated turbidity in the sample collected. Metals adhered to suspended solids in the sample from AOC3-SB1-MW1 likely resulted in the elevated metals concentrations that were detected.

At well NRG-MW3, elevated metals were also noted in May 2015 when compared with historic results. Historically, metals have generally been low or non-detect at NRG-MW3. For example, vanadium was reported at <0.72 ug/l and 5.3 ug/l in June 2014 and September 2014, respectively. As noted above the concentration of vanadium at well NRG-MW3 exceeded the GWPC in May 2015 (66.3 ug/l vs. 50 ug/l). Similar to well AOC3-SB1-MW1, the elevated concentrations of metals at NRG-MW3 in May 2015 may be the product of elevated turbidity in the sample as the result of a low water table. However, there is not sufficient data to confirm that conclusion. Future data from NRG-MW3 will be reviewed to assess if the May 2015 results are an anomaly, or a potential trend.

Laboratory Analytical - QA/QC Evaluation

Laboratory analysis completed as part of this assessment was conducted in accordance with CTDEEP's Reasonable Confidence Protocol and the site specific Quality Assurance Project Plan (QAPP). The site specific QAPP was developed for the subject site in accordance with EPA guidance (Shaw, 2011). The QAPP presents the requirements and procedures for conducting field sampling activities and investigations at the site so that (1) the data quality objectives specified for this project are met, (2) the field sampling protocols are documented and reviewed in a consistent manner, and (3) scientifically valid and defensible data are collected. Field sampling activities discussed above were completed in general compliance with the QAPP that has been generated for the site.

CB&I requested that laboratory analysis be conducted in accordance with the QAPP and CTDEEP's Reasonable Confidence Protocol (CTDEP, 2007). CB&I performed a data validation review for the laboratory report and documented the results in a data validation worksheet. The data validation

worksheet is included with the laboratory report in **Attachment 1**. This worksheet is consistent with the data quality assessment and data usability evaluations detailed in CTDEEP guidance (CTDEP, 2009)

In general, laboratory analyses were completed in accordance with the site QAPP and CTDEEP's Reasonable Confidence Protocol. However, a few minor quality assurance/quality control (QA/QC) issues, which are summarized in the validation worksheet and laboratory report narrative, were identified. These identified QA/QC issues resulted in some detection limits and reported results being qualified. Issues were noted with serial dilution for arsenic, beryllium vanadium and zinc. However no qualification was needed because the sample results were greater than 50 times the IDL, or were batch QC samples not from the subject site. Some metals results were reported at concentrations below the reporting limit but above the detection limit. These results were flagged "J" (estimated). Zinc was detected in the equipment blank sample collected. As a result, positive detects less than five times the concentration reported in the equipment blank sample were qualified "U" (non-detect).

In summary, each of the identified issues had no overall effect on the conclusions drawn from the data, and the data is acceptable for the purposes of this submittal.

ENGINEERED CONTROL CONSTRUCTION

As discussed in the prior status report, construction on the approved Engineered Controls for the site began during the week of July 14, 2014 and proceeded through the end of 2014. Installation of the final parts of the low permeable Engineered Control was temporarily suspended on January 12, 2015 due to winter weather conditions. Once snow cover cleared from the site and soil conditions were appropriate, construction continued on low permeable Engineered Control. During the week of May 4, 2015 activities resumed and included the seeding of the two low permeable Engineered Controls and minor pavement repairs to address damage from snow plows. Due to a lack of spring rainfall, watering of the vegetative cover began in June 2015. With the establishment of modest vegetative cover on the low permeable Engineered Controls in June 2015, the controls are considered substantially complete. They will be considered complete upon establishment of robust vegetative cover.

Construction of the gravel Engineered Controls in AOC 3B and AOC 12 was substantially complete during the week of November 10, 2014. Minor gravel application was conducted during this reporting period. As a modest field change to the EC, gravel will be installed in the entire Day Tank area. Upon completion of this activity, the gravel Engineered Controls in AOC 3B and AOC 12 will be considered complete.

Patching and repair of the existing asphalt in AOC-3B and AOC-12 to act as Engineered Controls was substantially complete during the previous reporting period. However, asphalt seal coating has not been conducted and is still pending.

A figure that illustrates work areas completed is provided as **Figure 2**. A completion report that provides details of construction and as-built drawings for each Engineered Control is expected to be included with the next site status report.

Day Tank Area Soil Management

In June 2015 facility personnel were conducting an excavation in the Day Tank area located just north of the main building (AOC-3B) to complete installation of a new containment wall and floor. During these activities petroleum impacted soil was encountered. The material encountered appeared to be a weathered #6 oil. In January 1987 a significant spill of #6 oil was reported to CTDEP and addressed in this area of the facility. The petroleum impacts encountered in June 2015 appeared to be residual impact from this previously reported and addressed spill. Petroleum impacted soil was encountered approximately 18 inches below grade along a portion of the excavation and appeared to be approximately two inches thick. A LEP (Andrew Walker) site visit to confirm site conditions and the plan of action was conducted on June 11, 2015. Approximately 80 CY of impacted soil, encountered during construction was excavated to a depth of 2 feet below grade. Based on visual observations and the viscous nature of #6 oil, no #6 oil impacted material remains in the work area. The excavation and the areas of impacted soil are illustrated on **Figure 3**.

Petroleum impacts associated ACO-3A, including the 1987 spill, were evaluated and documented during the Phase III assessment of the site. The observations of petroleum impact noted in the Day Tank area in June 2015 were generally consistent with the data in the Phase III assessment and therefore no additional assessment was required.

Impacted soil generated during the June 2015 excavation activities was stockpiled in roll-off containers. Following characterization this material (80 CY) will be shipped off site for appropriate disposal.

ADDITIONAL ENVIRONMENTAL ACTIVITIES

Additional environmental activities occurring at the site between January and June 2015 are described below:

- Based on previous discussions with CTDEEP and in conjunction with the revised site-specific Industrial/Commercial Direct Exposure Criteria (I/C DEC) for arsenic, Montville Power submitted an addendum to the approved Engineered Control for the subject site (CB&I, 2014b). Addendum 1, dated September 16, 2014, details controls such as fencing and signage in areas where the site-specific I/C DEC is proposed (AOC 5 and 9). CTDEEP approved this on April 20, 2015. Wetland permitting for the fencing associated with the Engineering Control addendum was completed during this reporting period. Work on the proposed fencing was started in July 2015 and will be reported in the next status report.
- Following discussions with CTDEEP, Montville Power submitted a revised request for approval of a site-specific I/C DEC for arsenic (Shaw, 2014a). Approval of a site specific arsenic I/C DEC was provided by CTDEEP on May 11, 2015 (CTDEEP, 2015b).

OUTSTANDING SUBMITTALS

The following items are outstanding submittals for which CTDEEP has not yet provided a response. NRG and CB&I respectfully request approval by October 2015.

 Montville Power submitted an Inaccessible Soil Exemption for the soil beneath certain permanent structures at the site (Shaw, 2013).

• In response to a CTDEEP request, CB&I presented CTDEEP with six methods for calculating a revised Alternative SWPC for arsenic in an email dated September 10, 2013.

SITE SCHEDULE

Outlined below is the site schedule that Montville Power and NRG expect to follow. This was recently submitted to CTDEEP on September 18, 2015.

Goal	Current Schedule Date	Goal Met?	Confirm/ Revise Schedule Date	Provide Justification if Date Has Changed
Investigation Completed	9/30/2010	Yes	9/30/2010	NA
ECO Checklist Submitted	1/29/2009	Yes	1/29/2009	NA
ECO Complete	2/11/2014	Yes	2/11/2014	NA
RAP Submitted to CTDEEP	NA	No	12/23/2015	(1)
RAP Public Noticed	6/30/2015	No	4/30/2016	(1)
RAP Approved (CA 400)	8/31/2015	No	6/30/2016	(1)
Remediation Started	7/2014	Yes	7/2014	(2)
Financial Assurance Posted	12/31/2015	No	12/15/2016	(2)
Construction Complete (CA 550)	6/30/2015	No	9/30/2018	(1)
Human Health EI (CA 725)	3/21/2002	Yes	3/21/2002	NA
Groundwater EI (CA 750)	12/8/2000	Yes	12/8/2000	NA

NRG and Montville Power will continue to provide updates on the status of response actions at the subject site on a semi-annual basis as requested by CTDEEP. Plans, submittals, and reports will be copied to the USEPA.

If you have any questions regarding this letter or any other site matter, please do not hesitate to call me at 617-589-6143.

Sincerely,

Andrew D. Walker, LEP, LSP

Project Manager

CB&I Environmental and Infrastructure, Inc.

Phone: 617-589-6143

E-mail Address: Andrew.Walker@CBI.com

Enclosures:

Tables

- Table 1 Groundwater Gauging Data
- Table 2 Groundwater Analytical Results GA Area 2015
- Table 3 Groundwater Analytical Results GB Area 2015
- Table 4 Groundwater Analytical Results NRG-MW5 Total Metals Compared to WQC

Figures

- Figure 1 Site Plan
- Figure 2 Proposed Engineered Controls Existing Conditions June 30, 2015
- Figure 3 Day Tank Area

Attachments

Attachment 1 - Laboratory Analytical Report for Groundwater with Data Validation Worksheets

CC:

- Mr. William Warzecha, CTDEEP (electronic)
- Mr. Ian Cambridge, Montville Power LLC (hard copy and electronic)
- Mr. Robert Spooner, NRG (electronic only)
- Mr. Juan Perez, USEPA (electronic only)
- Ms. Kim Tisa, USEPA (electronic only)

REFERENCES

- CB&I, 2014a. Revised Site-Specific I/C DEC Approval Request, Montville Generating Station, Montville Power LLC, Montville & Waterford, CT. CB&I Environmental and Infrastructure. September 16, 2014.
- CB&I, 2014b. Engineering Control Part 2, Addendum 1, Montville Generating Station, Montville Power LLC, Montville & Waterford, CT. CB&I Environmental and Infrastructure. September 16, 2014.
- CTDEP, 2007. Laboratory Quality Assurance and Quality Control Guidance, Reasonable Confidence Protocols Guidance Document. Connecticut Department of Environmental Protection. November 2007.
- CTDEP, 2009. Laboratory Quality Assurance and Quality Control, Data Quality Assessment and Data Usability Evaluation. Connecticut Department of Environmental Protection. May 2009.
- CTDEEP, 2013. Request for Criteria for Additional Polluting Substances and Alternative Criteria, Montville Station, 74 Lathrop Road, Montville. Connecticut Department of Energy & Environmental Protection. March 13, 2013.
- CTDEEP, 2015a. Request for Approval of Engineered Control Part 2 Addendum 1, Montville Station, 74 Lathrop Road, Montville. Connecticut. Department of Energy & Environmental Protection. April 20, 2015.
- CTDEEP, 2015b. Request for Alternative Criteria, Montville Power, LLC, 74 Lathrop Road, Montville. Connecticut. Department of Energy & Environmental Protection. May 11, 2015.
- Shaw 2010. Semi-annual Site Status Update and Schedule Adjustment Request, Montville Generating Station, Montville, Connecticut. Shaw Environmental, Inc. February 17, 2010.
- Shaw 2011. Quality Assurance Project Plan, NRG Montville Generating Station. Shaw Environmental, Inc. March 2008, Revised August 2011.
- Shaw, 2013. Notice of Inaccessible Soil Exemptions, Montville Generating Station, Montville, Connecticut. Shaw Environmental, Inc. April 30, 2013.

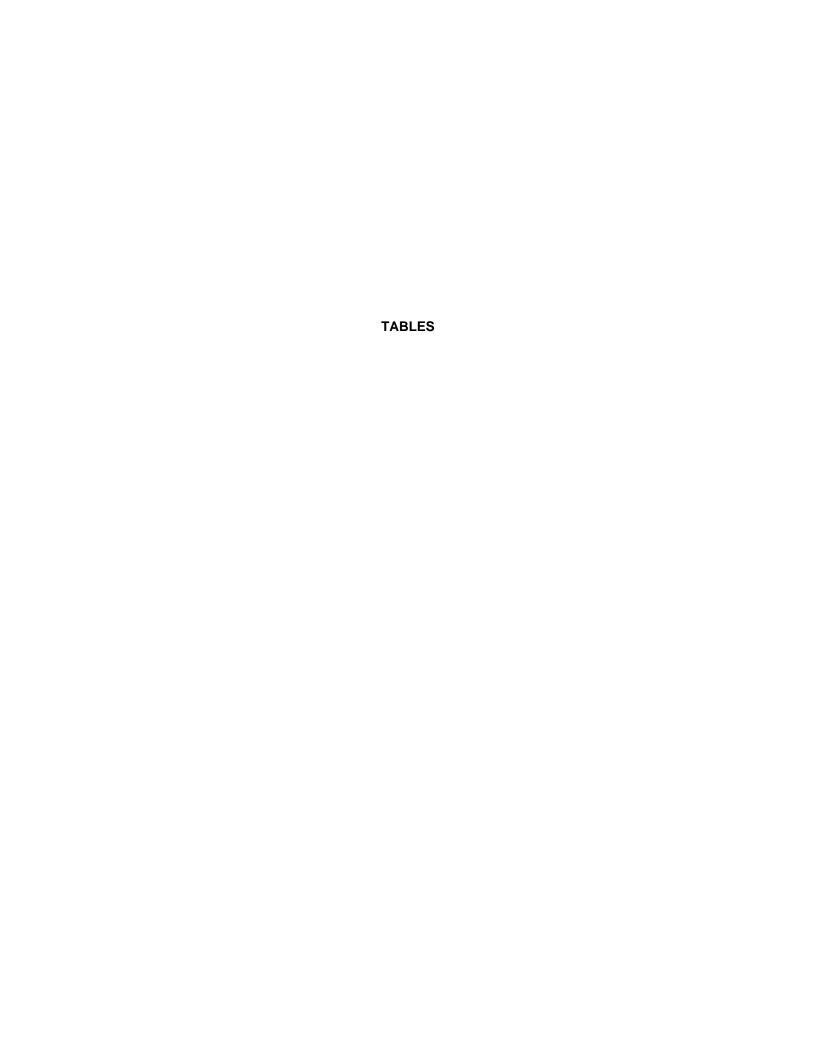


TABLE 1 GROUNDWATER GAUGING DATA (05/27/15 - 05/28/15)

Montville Power LLC 74 Lathrop Road Montville, Connecticut

Location	Date	Reference Elevation (Feet)	Depth to Water (Feet)	Depth to LNAPL (Feet)	LNAPL Thickness (Feet)	Groundwater Elevation (Feet)	Notes
AOC12-MW-301	05/27/15	14.44	12.12			2.32	DTB = 18.37'
AOC12-MW-305	05/27/15	13.57	11.47			2.10	DTB = 17.90'
AOC12-MW-306	05/27/15	13.82	12.26			1.56	DTB = 18.99'
AOC3-SB1-MW-1	05/27/15	10.04	7.79			2.25	DTB = 14.62'
AOC3-SB4-MW-2	05/27/15	6.51	4.79			1.72	DTB = 12.00'
NRG-MW-03	05/28/15	54.05	42.03			12.02	DTB = 43.64'
NRG-MW-05	05/28/15	10.59	10.46			0.13	DTB = 20.28'
NRG-MW-07	05/28/15	8.05	7.59			0.46	DTB = 17.21'

Notes: -- = Not Detected NA = Not Available

<0.01 = Trace amount LNAPL detected

Table 2 Groundwater Analytical Results GA Area 2015

Montville Power LLC Montville, CT

		GWPC	SWPC or Alt/Add SWPC (1)	NRG-MW-03 5/28/2015	NRG-MW-05 5/28/2015
Metals (Total)					
Arsenic	(ug/l)	10	10 (1)	5.6	6.3
Beryllium	(ug/l)	4	20 (1)	0.70BJ	0.083BJ
Copper	(ug/l)	1300	310 (1)	69.3	<1.0
Nickel	(ug/l)	100	880	27.9BJ	9.4
Vanadium	(ug/l)	50	4400 (1)	{66.3}	5.9BJ
Zinc	(ug/l)	5000	8100 (1)	49.4	<18.0U
Field Parameters					
рН		NE	NE		6.4
ORP	(mv)	NE	NE		55
Dissolved Oxygen	(mg/l)	NE	NE		0.32
Specific Conductivity	(us/cm)	NE	NE		0.109
Temperature	(deg.c)	NE	NE		11.67
Turbidity	(ntu)	NE	NE		4.4

Notes:

SWPC = Surface Water Protection Criteria
GWPC = Groundwater Protection Criteria

--- = Constituent not analyzed for.

NE = None Established.

(1)= Approved Alternative and Additional SWPC in March 13, 2013 CTDEEP letter

{BOLD} = Result is above appropriate SWPC or GWPC

ug/L = micrograms per liter

mg/L = milligrams per liter

uS/cm = miscroseimens per centimeter

deg. C = degrees celcius

ntu = nephelometric turbidity unit

- U = Non-detect per data validation
- J = Analyte less than reporting limit (RL), but greater than Instrument Detection Limit or Method Detection Limit (Organics) or estimated based on data validation
- B = Analyte less than reporting limit (RL), but greater than Instrument Detection Limit or Method Detection Limit (Inorganics)

All results have been validated.

Table 3 Groundwater Analytical Results GB Area 2015

Montville Power LLC Montville, CT

		SWPC	AOC12-MW-301	AOC12-MW-305	AOC12-MW-306	AOC12-MW-306	AOC3-SB1-MW-1	AOC3-SB4-MW-2	NRG-MW-07
		or Alt/Add	5/27/2015	5/27/2015	5/27/2015	5/27/2015	5/28/2015	5/27/2015	5/28/2015
CONSTITUENT	UNITS	SWPC (1)	Primary	Primary	Primary	Duplicate 1	Primary	Primary	Primary
Metals (Total)									
Arsenic	(ug/l)	10 (1)	2.9BJ	{27.5}	{68.6}	{70.0}	{335}	5.6	{18.0}
Beryllium	(ug/l)	20 (1)	0.60BJ	<0.25	1.2BJ	1.1BJ	{21.9}	<0.25	<0.25
Copper	(ug/l)	310 (1)	3.7BJ	<2.4	<2.4	<2.4	{1240}	<2.4	<2.4
Nickel	(ug/l)	880	15.0BJ	2.0BJ	22.6BJ	22.7BJ	{1040}	1.5BJ	13.9BJ
Vanadium	(ug/l)	4400 (1)	3.9BJ	<0.51	55.6	59.1	1030	0.60BJ	0.60BJ
Zinc	(ug/l)	8100 (1)	<24.8U	<12.7BU	68.7	69.8	1490	<11.7BU	94.1
Field Parameters									
рН		NE	5.28	6.61	5.15		2.93	6.45	6.69
ORP	(mv)	NE	221.7	-28.4	141.9		428.1	-7.6	-33.1
Dissolved Oxygen	(mg/l)	NE	0.52	0.47	0.47		2.9	0.35	0.79
Specific Conductivity	(us/cm)	NE	0.42	0.316	0.332		1.563	0.197	1.102
Temperature	(deg.c)	NE	16.7	17.14	15.89		18.4	15.88	14.93
Turbidity	(ntu)	NE	21.4	5.6	5.9		16.8	3.3	43.1

Notes:

SWPC = Surface Water Protection Criteria

--- = Constituent not analyzed for.

NE = None Established.

(1)= Approved Alternative and Additional SWPC in March 13, 2013 CTDEEP letter

{BOLD} = Result is above appropriate SWPC

ug/L = micrograms per liter

mg/L = milligrams per liter

uS/cm = miscroseimens per centimeter

deg. C = degrees Celsius

ntu = nephelometric turbidity unit

U = Non-detect per data validation

J = Analyte less than reporting limit (RL), but greater than Instrument Detection Limit or Method Detection Limit (Organics) or estimated based on data validation

B = Analyte less than reporting limit (RL), but greater than Instrument Detection Limit or Method Detection Limit (Inorganics)

All results have been validated.

Table 4 Groundwater Analytical Results NRG-MW5 total Metals Compared to WQC

Montville Power LLC Montville, Connecticut

	Chronic	Chronic									
	wqc	wqc	NRG-MW-05								
Constituent (ug/L)	Fresh	Salt	6/16/2011	9/26/2011	9/28/2012	5/8/2013	3/11/2014	6/11/2014	9/26/2014	12/5/2014	5/28/2015
Arsenic	150	36	<4.0	1.8BJ	2.1BJ	<2.9	4.9	4.3	8.3	9.4	6.3
Beryllium	NE	NE	<4.0	<0.24	<0.28	<0.25	0.084BJ	0.093BJ	0.098BJ	0.055BJ	0.083BJ
Copper	4.8	3.1	<25	<2.5	{3.2}BJ	<7.0	<0.89	<0.89	1.7BJ	0.61BJ	<1.0
Nickel	28.9	8.2	<40	{9.9}BJ	{9.0}BJ	{11.5}BJ	{9.5}	{9.1}	{12.6}	{10.3}	{9.4}
Vanadium	NE	NE	<10	<1.5	1.5BJ	<2.8	4	3.3BJ	4.3	4.8	5.9BJ
Zinc	65	81	20	25.3	<23.7U	<23.3U	<18.9U	<15.1U	19.7	<15.6U	<18.0U

Notes:

WQC = Numerical Water Quality Criteria for Chemical Constituents.

ug/L = micrograms per liter.

B = Less than detection limit (inorganics), lab qualifier.

J - Less than detection limit, validation qualifier.

U = Result determined to be non-detect at indicated detection limit, based on validation protocol.

{BOLD} = Result is greater than WQC Chronic Fresh or WQC Chronic Salt.

NE = None established.

All results have been validated.



PROPERTY BOUNDARY FUEL OIL PIPING EXISTING FENCE LINE

LEGEND

GROUNDWATER MONITORING WELLS

RECOVERY WELL

SOIL BORING LOCATION

ELECTRICAL TOWER

AREA OF CONCERN (AOC)

DIESEL INTERNAL COMBUSTION (ICU) ENGINE UNITS

WETLAND LINE WETLAND FLAG APPROXIMATE LOCATION OF SEDIMENT SAMPLE

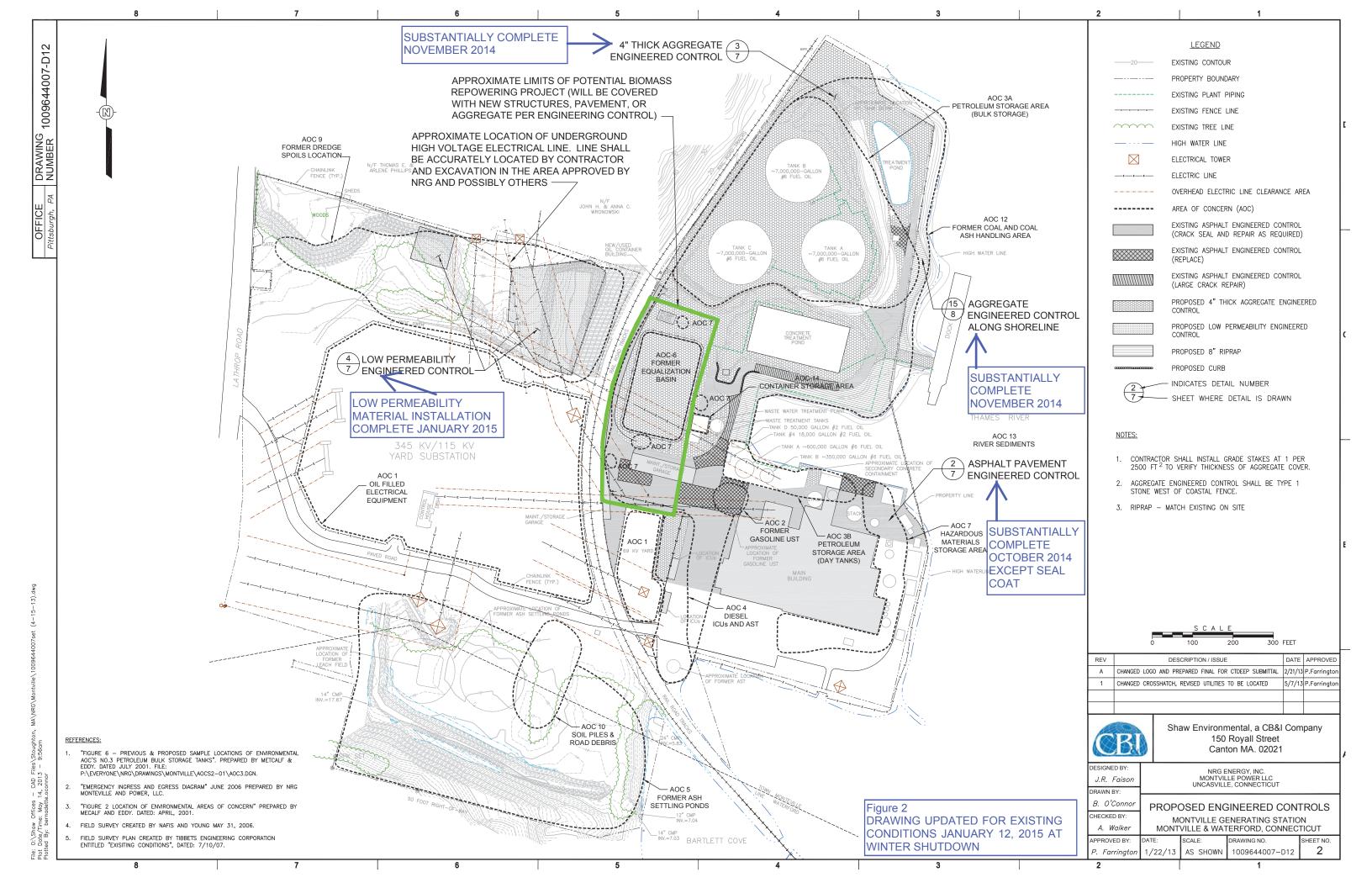
LOCATION OF SHALLOW SOIL BORINGS FORMER DREDGE MATERIALS LOCATION INVESTIGATION—OCTOBER, 2000

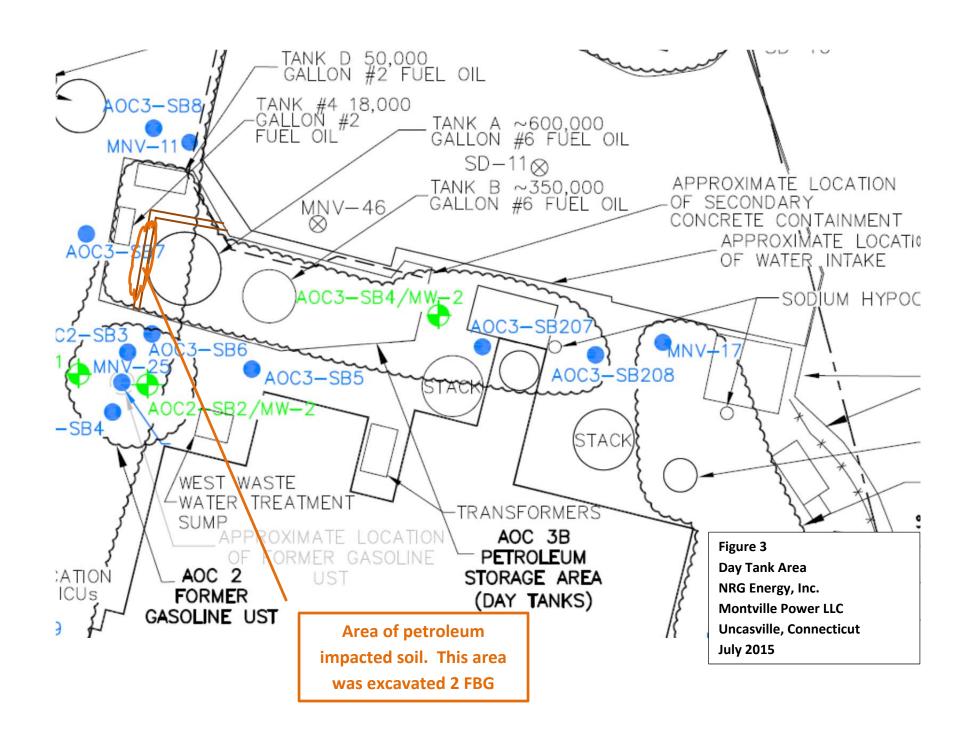
OCATION OF DEEP SOIL BORINGS FORMER REDGE MATERIALS LOCATION VVESTIGATION—OCTOBER, 2000

SHAW ENVIRONMENTAL, INC.,
A CB&I COMPANY
150 ROYALL STREET
CANTON, MASSACHUSETTS
(617) 589-5111

FIGURE 1

SITE PLAN







Data Usability Worksheet

Project Name:

NRG Montville

Job Number:

1009644013

Prepared By: Validated By:

Kim Napier Kim Napier Date :

6/18/2015 6/18/2015

Matrix:

Groundwater

Cidaliditat

Analyte Group :

Metals ICP Metals ICP/MS Analytical Method SW846 6010C

SW846 6020A

Completed RCP Certification Form included: Yes

Laboratory ID No. MC38997

Chain of Custody included in Data Package? Yes

Is it Complete? Yes

		Allowable	Allowable	
Sample Collection Date	Analysis	Holding Time for	Holding Time for	Analysis Date
			ŀ	06/03, 06/04,
5/27, 5/28/2015	METALS IÇP 6010C	180 Days	180 Days	06/05/2015
5/27, 5/28/2015	METALS ICP/MS 6020A	180 Days	180 Days	6/5/15

Sample temperature within QC limits:

Yes, < 6.0° C

3°C

Surrogate Recovery

Are all % recoveries within the allowable range? Yes

If No, List sample ID where range was exceeded: N/A

MS/MSD

Are all MS/MSD sample recoveries within the QC limits?

YES

If No, list sample ID, date and compound where limit was exceeded: N/A

Laboratory Control Samples

Are all laboratory control sample recoveries within the QC limits?

Yes

If no, list sample ID where range was exceeded:

Serial Dilution

Both project specific and batch QC were performed and some interference was noted for Be, As, V, and Zn. No qualification was necessary since sample results were < 50-times IDL or not NRG sample that was spiked (Zn).

Equipment Field Blank ID:

EB-1

Trip Blank ID:

N/A

Method Blank:

Were any compounds identified in the method blank, field blank or trip blank above detection limits?

YES

If so, list Sample ID/Compound/Concentration/Units:

EB-1 had zinc at 6.1 ug/L

Zn results for AOC12-MW301, AOC12-MW305, AOC3-SB4/MW2 and NRG-MW5 qualified U since sample results < 5-times blank amount.

No other qualification necessary since sample results were greater than 5-times the blank amount.

Results flagged with B for inorganics should be qualified J unless U qualified due to blank due to blank contamination

Reviewed By:



06/12/15



Technical Report for

CB&I

NRG Montville Lathrop Rd. Uncasville, CT

1009644013.00221110 PO#

Accutest Job Number: MC38997

Sampling Dates: 05/27/15 - 05/28/15

Report to:

CB&I 150 Royall Street Canton, MA 02021 andrew.walker@shawgrp.com

ATTN: Andrew Walker

Total number of pages in report: 34



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: Frank DAgostino 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

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Sample Summary

CB&I

Job No: MC38997

NRG Montville Lathrop Rd. Uncasville, CT Project No: 1009644013.00221110 PO#

Sample Number	Collected Date	Time By	Received	Matr Code		Client Sample ID
MC38997-1	05/27/15	07:10 PL	05/29/15	AQ	Equipment Blank	EB-1
MC38997-2	05/27/15	09:00 PL	05/29/15	AQ	Ground Water	AOC12-MW306
MC38997-3	05/27/15	09:00 PL	05/29/15	AQ	Ground Water	AOC12-MW306(DUP)
MC38997-4	05/27/15	11:10 PL	05/29/15	AQ	Ground Water	AOC12-MW301
MC38997-5	05/28/15	09:30 PL	05/29/15	AQ	Ground Water	AOC-3-SB1/MW1
MC38997-6	05/27/15	14:20 PL	05/29/15	AQ	Ground Water	AOC12-MW305
MC38997-7	05/27/15	16:15 PL	05/29/15	AQ	Ground Water	AOC3-SB4/MW2
MC38997-8	05/28/15	09:05 PL	05/29/15	AQ	Ground Water	NRG-MW7
MC38997-9	05/28/15	00:00 PL	05/29/15	AQ	Ground Water	NRG-MW5
MC38997-10	05/28/15	13:15 PL	05/29/15	AQ	Ground Water	NRG-MW3





SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: CB&I Job No MC38997

Site: NRG Montville Lathrop Rd. Uncasville, CT Report Date 6/12/2015 9:48:32 AM

10 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on between 05/27/2015 and 05/28/2015 and were received at Accutest on 05/29/2015 properly preserved, at 3 Deg. C and intact. These Samples received an Accutest job number of MC38997. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals By Method SW846 6010C

Matrix: AQ Batch ID: MP24674

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC38998-2SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Beryllium are outside control limits for sample MP24674-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).</p>
- Only selected metals requested.

Metals By Method SW846 6020A

Matrix: AQ Batch ID: MP24681

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC39061-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic, Vanadium are outside control limits for sample MP24681-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).</p>
- MP24681-SD1 for Zinc: Serial dilution indicates possible matrix interference.
- Only selected metals requested.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(MC38997).

Friday, June 12, 2015 Page 1 of 1



Summary of Hits Job Number: MC38997 Account: CB&I

NRG Montville Lathrop Rd. Uncasville, CT 05/27/15 thru 05/28/15**Project:**

Collected:

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC38997-1	EB-1					
Zinc		6.1 B	20	1.0	ug/l	SW846 6010C
MC38997-2	AOC12-MW306					
Arsenic Beryllium Nickel Vanadium Zinc		68.6 1.2 B 22.6 B 55.6 68.7	4.0 4.0 40 10 20	1.7 0.25 0.50 0.51 1.0	ug/l ug/l ug/l ug/l ug/l	SW846 6010C SW846 6010C SW846 6010C SW846 6010C SW846 6010C
MC38997-3	AOC12-MW306(I	OUP)				
Arsenic Beryllium Nickel Vanadium Zinc		70.0 1.1 B 22.7 B 59.1 69.8	4.0 4.0 40 10 20	1.7 0.25 0.50 0.51 1.0	ug/l ug/l ug/l ug/l ug/l	SW846 6010C SW846 6010C SW846 6010C SW846 6010C SW846 6010C
MC38997-4	AOC12-MW301					
Arsenic Beryllium Copper Nickel Vanadium Zinc		2.9 B 0.60 B 3.7 B 15.0 B 3.9 B 24.8	4.0 4.0 25 40 10 20	1.7 0.25 2.4 0.50 0.51 1.0	ug/l ug/l ug/l ug/l ug/l ug/l	SW846 6010C SW846 6010C SW846 6010C SW846 6010C SW846 6010C SW846 6010C
MC38997-5	AOC-3-SB1/MW1	L				
Arsenic ^a Beryllium ^a Copper ^a Nickel ^a Vanadium ^a Zinc ^a		335 21.9 1240 1040 1030 1490	8.0 8.0 50 80 20 40	3.4 0.50 4.8 1.0 1.0 2.0	ug/l ug/l ug/l ug/l ug/l ug/l	SW846 6010C SW846 6010C SW846 6010C SW846 6010C SW846 6010C SW846 6010C
MC38997-6	AOC12-MW305					
Arsenic Nickel Zinc		27.5 2.0 B 12.7 B	4.0 40 20	1.7 0.50 1.0	ug/l ug/l ug/l	SW846 6010C SW846 6010C SW846 6010C



Summary of Hits Job Number: MC38997

Account: CB&I

Project: NRG Montville Lathrop Rd. Uncasville, CT 05/27/15 thru 05/28/15

Collected:

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC38997-7	AOC3-SB4/MW2					
Arsenic Nickel Vanadium Zinc		5.6 1.5 B 0.60 B 11.7 B	4.0 40 10 20	1.7 0.50 0.51 1.0	ug/l ug/l ug/l ug/l	SW846 6010C SW846 6010C SW846 6010C SW846 6010C
MC38997-8	NRG-MW7					
Arsenic Nickel Vanadium Zinc		18.0 13.9 B 0.60 B 94.1	4.0 40 10 20	1.7 0.50 0.51 1.0	ug/l ug/l ug/l ug/l	SW846 6010C SW846 6010C SW846 6010C SW846 6010C
MC38997-9	NRG-MW5					
Arsenic Beryllium Nickel Vanadium Zinc		6.3 0.083 B 9.4 5.9 B 18.0	1.0 1.0 2.0 8.0 8.0	0.42 0.042 0.14 1.4 2.0	ug/l ug/l ug/l ug/l ug/l	SW846 6020A SW846 6020A SW846 6020A SW846 6020A
MC38997-10	NRG-MW3					
Arsenic Beryllium Copper Nickel Vanadium Zinc		5.6 0.70 B 69.3 27.9 B 66.3 49.4	4.0 4.0 25 40 10 20	1.7 0.25 2.4 0.50 0.51 1.0	ug/l ug/l ug/l ug/l ug/l ug/l	SW846 6010C SW846 6010C SW846 6010C SW846 6010C SW846 6010C SW846 6010C

⁽a) Elevated RL due to dilution required for matrix interference.





Sample Results	
Report of Analysis	



Report of Analysis

Client Sample ID: EB-1

Lab Sample ID:MC38997-1Date Sampled:05/27/15Matrix:AQ - Equipment BlankDate Received:05/29/15Percent Solids:n/a

Project: NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	1.7 U	4.0	1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	0.25 U	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper	2.4 U	25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Nickel	0.50 U	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Vanadium	0.51 U	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Zinc	6.1 B	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177

(2) Prep QC Batch: MP24674

RL = Reporting Limit U = Indicates a result < MDL

MDL = Method Detection Limit B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: AOC12-MW306

Lab Sample ID: MC38997-2

Matrix: AQ - Ground Water

Date Sampled: 05/27/15

Percent Solids: n/a

Project: NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	68.6	4.0	1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	1.2 B	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper	2.4 U	25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Nickel	22.6 B	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Vanadium	55.6	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Zinc	68.7	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177(2) Prep QC Batch: MP24674

RL = Reporting Limit U = Indicates a result < MDL

MDL = Method Detection Limit B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: AOC12-MW306(DUP)

Lab Sample ID:MC38997-3Date Sampled:05/27/15Matrix:AQ - Ground WaterDate Received:05/29/15Percent Solids:n/a

Project: NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	70.0	4.0	1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	1.1 B	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper	2.4 U	25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Nickel	22.7 B	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Vanadium	59.1	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Zinc	69.8	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177

(2) Prep QC Batch: MP24674

RL = Reporting Limit U =

MDL = Method Detection Limit

U = Indicates a result < MDL



Report of Analysis

Client Sample ID: AOC12-MW301

Lab Sample ID: MC38997-4

Matrix: AQ - Ground Water

Date Sampled: 05/27/15

Date Received: 05/29/15

Percent Solids: n/a

Project: NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.9 B	4.0	1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	0.60 B	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper	3.7 B	25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Nickel	15.0 B	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Vanadium	3.9 B	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Zinc	24.8	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177

(2) Prep QC Batch: MP24674

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL



Report of Analysis

Client Sample ID: AOC-3-SB1/MW1 Lab Sample ID: MC38997-5

Lab Sample ID:MC38997-5Date Sampled:05/28/15Matrix:AQ - Ground WaterDate Received:05/29/15Percent Solids:n/a

Project: NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic a	335	8.0	3.4	ug/l	2	06/02/15	06/04/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium a	21.9	8.0	0.50	ug/l	2	06/02/15	06/04/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper a	1240	50	4.8	ug/l	2	06/02/15	06/04/15 EAL	SW846 6010C ¹	SW846 3010A ²
Nickel a	1040	80	1.0	ug/l	2	06/02/15	06/04/15 EAL	SW846 6010C ¹	SW846 3010A ²
Vanadium ^a	1030	20	1.0	ug/l	2	06/02/15	06/04/15 EAL	SW846 6010C ¹	SW846 3010A ²
Zinc ^a	1490	40	2.0	ug/l	2	06/02/15	06/04/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18181(2) Prep QC Batch: MP24674

(a) Elevated RL due to dilution required for matrix interference.

RL = Reporting Limit

MDL = Method Detection Limit B = Indicates a result > = MDL but < RL



U = Indicates a result < MDL

Report of Analysis

Client Sample ID: AOC12-MW305

Lab Sample ID: MC38997-6

Matrix: AQ - Ground Water

Date Sampled: 05/27/15

Percent Solids: n/a

Project: NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	27.5	4.0	1.7	ug/l	1	06/02/15	06/05/15 EAL	SW846 6010C ²	SW846 3010A ³
Beryllium	0.25 U	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ³
Copper	2.4 U	25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ³
Nickel	2.0 B	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ³
Vanadium	0.51 U	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ³
Zinc	12.7 B	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ³

(1) Instrument QC Batch: MA18177(2) Instrument QC Batch: MA18183(3) Prep QC Batch: MP24674

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL



4

Report of Analysis

Client Sample ID: AOC3-SB4/MW2

Lab Sample ID:MC38997-7Date Sampled:05/27/15Matrix:AQ - Ground WaterDate Received:05/29/15Percent Solids:n/a

Project: NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.6	4.0	1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	0.25 U	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper	2.4 U	25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Nickel	1.5 B	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Vanadium	0.60 B	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Zinc	11.7 B	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177

(2) Prep QC Batch: MP24674

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL



4

Report of Analysis

Client Sample ID: NRG-MW7

Lab Sample ID: MC38997-8

Matrix: AQ - Ground Water

Date Sampled: 05/28/15

Date Received: 05/29/15

Percent Solids: n/a

Project: NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	18.0	4.0	1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	0.25 U	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper	2.4 U	25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Nickel	13.9 B	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Vanadium	0.60 B	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Zinc	94.1	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177(2) Prep QC Batch: MP24674

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL



Report of Analysis

Client Sample ID: NRG-MW5 Lab Sample ID: MC38997-9

Lab Sample ID:MC38997-9Date Sampled:05/28/15Matrix:AQ - Ground WaterDate Received:05/29/15

Percent Solids: n/a

Project: NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.3	1.0	0.42	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²
Beryllium	0.083 B	1.0	0.042	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²
Copper	1.0 U	2.0	1.0	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²
Nickel	9.4	2.0	0.14	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²
Vanadium	5.9 B	8.0	1.4	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²
Zinc	18.0	8.0	2.0	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18185

(2) Prep QC Batch: MP24681

 $RL = \ Reporting \ Limit \\ U = \ Indicates \ a \ result < \ MDL$

MDL = Method Detection Limit B = Indicates a result > = MDL but < RL



Page 1 of 1

Report of Analysis

Client Sample ID: NRG-MW3

Lab Sample ID: MC38997-10

Matrix: AQ - Ground Water

Date Sampled: 05/28/15

Percent Solids: n/a

Project: NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.6	4.0	1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	0.70 B	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper	69.3	25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Nickel	27.9 B	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Vanadium	66.3	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Zinc	49.4	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177

(2) Prep QC Batch: MP24674

RL = Reporting Limit U = Indicates a result < MDL

MDL = Method Detection Limit B = Indicates a result > = MDL but < RL







Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- · Chain of Custody
- RCP Form
- Sample Tracking Chronicle
- QC Evaluation: CT RCP Limits



5.28.15

CHAIN OF CUSTODY

Accutest Laboratories of New England FED.EX Tracking # 495 Technology Center West, Building One TEL. 508-481-6200 FAX: 508-481-7753 MC38997 www.accutest.com Project Information Client / Reporting Information Requested Analysis (see TEST CODE sheet) Matrix Codes DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB- Equipment Blank
RB- Rinse Blank CB&I Environmental NRG Montville 6010) 150 Royall Street Lathrop Road Billing Information (If different from Report to) (EPA (Low Canton, MA 02021 Uncasville, CT Raymond Cadorette 1009644013-00221110 Metals 6020) Metals 617-589-6102 rojeci Manager Daniel Leahy 617-212-8276 RB- Rinse Blank TB-Trip Blank Andrew Walker Select HN03 HOS Field ID / Point of Collection LAB USE ONLY 5.27.15 0710 1 EB-1 $_{\mathrm{PL}}$ ì ACC 12 - MW 306 0900 ŧ 3 AOC 12 - MW 306 (OUP) 0900 ž 1110 (1 4 40C/2-MW 301 5 ACC3-SBI/MWI 5.28.15 0930 1 -6 AOC12-MW 305 1 5.27.15 1420 İ ŧ 7 AOC 3-SB4/MW2 5.27.15 1615 5.28.15 0905 8 NRG-MW7 1 NRG-MW5 i LOC'50 10 NRG-MW-3 1315 1 Data Delive
Commercial "A" (Level 1)
Commercial "R" (1) Data Deliverable Information NYASP Category A
NYASP Category B Turnaround Time (Business days) Approved By (Accutest PM): / Date Metals analyses (As,Be,Cu,Ni,V,Zn) Std. 10 Business Days Std. 5 Business Days (By Contract only) FULLT1 CT RCP FULLT1 (Level 3+4) State Forms CTDEP RCP and site specific QAPP. EDD Format GISKey 5 Day RUSH Detection limits must meet CT standards 3 Day EMERGENCY Other___ Commercial "A" = Results Only 2 Day EMERGENCY and Water Quality Criteria for NRG-MW5 1 Day EMERGENCY Commercial "B" = Results + QC Summary Report to MDL for NRG MW-5 only. nergency & Rush T/A data available VIA Lablink Sample Custody must be documented below each time samples change possession, including court

Recitive flow. 5 as 4.

elinguished By:

Intect
Not intec

Preserved whe

MC38997: Chain of Custody Page 1 of 2

On Ice

Z, J







Accutest Laboratories Sample Receipt Summary

Accutest Job Number: M	238997	с	lient: CB&I		Project: NRG Montville			
Date / Time Received: 5/2	29/2015 3	3:05:00 PM	Delivery	Method:	Airbill #'s:			
Cooler Temps (Initial/Adjus	ted): #1	1: (3/3);						
1. Custody Seals Present:	Y or N		COC Present:	<u>Y or N</u> ✓ □	Sample Integrity - Documentation 1. Sample labels present on bottles: 2. Container labeling complete:	<u>Y</u>	or N	
Cooler Temperature	Υ	or N			Sample container label / COC agree:	✓		
1. Temp criteria achieved: 2. Thermometer ID: 3. Cooler media: 4. No. Coolers:	✓	G1; ce (Bag)			Sample Integrity - Condition 1. Sample recvd within HT: 2. All containers accounted for: 3. Condition of sample:	<u>Y</u> ✓	or N	
Quality Control Preservation	on Y	or N	N/A		Sample Integrity - Instructions	Υ	or N	N/A
Trip Blank present / cooler: Trip Blank listed on COC:			✓		Analysis requested is clear: Bottles received for unspecified tests	⊻	□	N/A
Samples preserved properly VOCa bandance from	_				Sufficient volume recvd for analysis: Compositing instructions clear:	V		✓
VOCs headspace free:			\checkmark		Compositing instructions clear: Filtering instructions clear:			✓
Comments								
Accutest Laboratories V:(508) 481-6200					Center West, Bldg One 8) 481-7753			orough, MA 01752 accutest.com

MC38997: Chain of Custody





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Reasonable Confidence Protocol Laboratory Analysis QA/QC Certification Form

Laboratory Name: Accutest New England Client: CB&I

Project Location: NRG Montville Lathrop Rd. Uncasville, CT Project Number: 1009644013. PO#

Sampling Date(s): 5/27/2015

Laboratory Sample ID(s): MC38997-1, MC38997-2, MC38997-3, MC38997-4, MC38997-5, MC38997-6, MC38997-

7, MC38997-8, MC38997-9, MC38997-10

Methods: SW846 6010C SW846 6020A

Methods:	SW846 6010C, SW846 6020A	
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes 🔽 No 🗖
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes No No NA 🗹
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes 🗹 No 🗀
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No □
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes No 🗹
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes 🔽 No 🗀
	b) Were these reporting limits met?	Yes ☑ No ☐
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes No 🗹
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes □ No ⊡

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

l, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized

Signature: from factorial Signature: Printed Name: Reza Tand

Position: Lab Director

Reza Tand Date: 6/12/2015

Accutest New England



Internal Sample Tracking Chronicle

CB&I

Job No: MC38997

NRG Montville Lathrop Rd. Uncasville, CT Project No: 1009644013.00221110 PO#

Sample Number	Method	Analyzed	Ву	Prepped	Ву	Test Codes
MC38997-1 EB-1	Collected: 27-MAY-15	07:10 By: PL	Receiv	ed: 29-MAY	-15 By	: SAP
MC38997-1	SW846 6010C	03-JUN-15 13:03	EAL	02-JUN-15	EM	AS,BE,CU,NI,V,ZN
MC38997-2 AOC12-MV	Collected: 27-MAY-15 V306	09:00 By: PL	Receiv	ed: 29-MAY	7-15 By	: SAP
MC38997-2	SW846 6010C	03-JUN-15 13:09	EAL	02-JUN-15	EM	AS,BE,CU,NI,V,ZN
MC38997-3 AOC12-MV	Collected: 27-MAY-15 V306(DUP)	09:00 By: PL	Receiv	ed: 29-MAY	-15 By	: SAP
MC38997-3	SW846 6010C	03-JUN-15 13:15	EAL	02-JUN-15	EM	AS,BE,CU,NI,V,ZN
MC38997-4 AOC12-MV	Collected: 27-MAY-15 V301	11:10 By: PL	Receiv	ed: 29-MAY	-15 By	: SAP
MC38997-4	SW846 6010C	03-JUN-15 13:21	EAL	02-JUN-15	EM	AS,BE,CU,NI,V,ZN
MC38997-5 AOC-3-SB1	Collected: 28-MAY-15 /MW1	09:30 By: PL	Receiv	ed: 29-MAY	7-15 By	: SAP
MC38997-5	SW846 6010C	04-JUN-15 17:53	EAL	02-JUN-15	EM	AS,BE,CU,NI,V,ZN
MC38997-6 AOC12-MV	Collected: 27-MAY-15 V305	14:20 By: PL	Receiv	ed: 29-MAY	-15 By	: SAP
	SW846 6010C SW846 6010C	03-JUN-15 13:44 05-JUN-15 15:16				BE,CU,NI,V,ZN AS
MC38997-7 AOC3-SB4/	Collected: 27-MAY-15 MW2	16:15 By: PL	Receiv	ed: 29-MAY	7-15 By	: SAP
MC38997-7	SW846 6010C	03-JUN-15 13:50	EAL	02-JUN-15	EM	AS,BE,CU,NI,V,ZN
MC38997-8 NRG-MW7	Collected: 28-MAY-15	09:05 By: PL	Receiv	ed: 29-MAY	7-15 By	: SAP
MC38997-8	SW846 6010C	03-JUN-15 13:56	EAL	02-JUN-15	EM	AS,BE,CU,NI,V,ZN

Internal Sample Tracking Chronicle

CB&I

Job No: MC38997

NRG Montville Lathrop Rd. Uncasville, CT Project No: 1009644013.00221110 PO#

Sample Number	Method	Analyzed	Ву	Prepped	Ву	Test Codes
MC38997-9 NRG-MW5	Collected: 28-MAY-15	00:00 By: PL	Receiv	ved: 29-MAY	7-15 By	v: SAP
MC38997-9	9 SW846 6020A	05-JUN-15 16:02	VY	04-JUN-15	EM	ASMS,BEMS,CUMS,NIMS,VM ZNMS
MC38997-1 NRG-MW3	Collected: 28-MAY-15	13:15 By: PL	Receiv	ved: 29-MAY	7-15 By	y: SAP
MC38997-	10SW846 6010C	03-JUN-15 14:01	EAL	02-JUN-15	EM	AS,BE,CU,NI,V,ZN

Job Number: MC38997 Account: CB&I

Project: NRG Montville Lathrop Rd. Uncasville, CT

Collected: 05/27/15 thru 05/28/15

QC Sample ID CAS# Analyte Sample Result Result Units Limits
Type Type

No Exceptions found.





^{*} Sample used for QC is not from job MC38997



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries



BLANK RESULTS SUMMARY Part 2 - Method Blanks

Login Number: MC38997 Account: FDG - CB&I

Project: NRG Montville Lathrop Rd. Uncasville, CT

QC Batch ID: MP24674 Matrix Type: AQUEOUS

Prep Date:

Methods: SW846 6010C Units: ug/l

06/02/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	28		
Antimony	6.0	1.1	2		
Arsenic	4.0	1.6	1.7	0.0	<4.0
Barium	50	. 35	1		
Beryllium	4.0	.15	.25	-0.10	<4.0
Bismuth	50	1.3	2.1		
Boron	100	.9	1.1		
Cadmium	4.0	.16	.43		
Calcium	5000	6.9	15		
Chromium	10	.36	.48		
Cobalt	50	.15	.28		
Copper	25	.59	2.4	-0.30	<25
Gold	50	1.1	1.5		
Iron	100	3.3	17		
Lead	5.0	.78	1.7		
Lithium	500	2.3	2.5		
Magnesium	5000	23	54		
Manganese	15	.056	1.4		
Molybdenum	100	1.7	3.6		
Nickel	40	.21	.5	-0.20	<40
Palladium	50	.92	2.6		
Platinum	50	4.6	5.4		
Potassium	5000	41	49		
Selenium	10	1.5	2		
Silicon	100	1.1	30		
Silver	5.0	.56	1		
Sodium	5000	17	77		
Sulfur	50	2.3	4.6		
Strontium	10	.2	.22		
Thallium	5.0	.54	1.7		
Tin	100	.39	.81		
Titanium	50	.34	.51		
Tungsten	100	3.1	22		

BLANK RESULTS SUMMARY Part 2 - Method Blanks

Login Number: MC38997

Account: FDG - CB&I Project: NRG Montville Lathrop Rd. Uncasville, CT

QC Batch ID: MP24674 Methods: SW846 6010C Matrix Type: AQUEOUS Units: $\mbox{ug/l}$

Prep Date:

06/02/15

Metal	RL	IDL	MDL	MB raw	final
Vanadium	10	.61	.51	0.20	<10
Zinc	20	.53	1	0.20	<20
Zirconium	50	.19	1.2		

Associated samples MP24674: MC38997-1, MC38997-2, MC38997-3, MC38997-4, MC38997-5, MC38997-6, MC38997-7, MC38997-8, MC38997-10

Results < IDL are shown as zero for calculation purposes (*) Outside of QC limits (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC38997 Account: FDG - CB&I

Project: NRG Montville Lathrop Rd. Uncasville, CT

QC Batch ID: MP24674 Methods: SW846 6010C Matrix Type: AQUEOUS Units: ug/1

Prep Date:			06/02/15					06/02/15	
Metal	BSP Result	Spikelot MPICP7	% Rec	QC Limits	BSD Result	Spikelot MPICP7	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	523	500	104.6	80-120	523	500	104.6	0.0	20
Barium	anr								
Beryllium	495	500	99.0	80-120	502	500	100.4	1.4	20
Bismuth									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	487	500	97.4	80-120	501	500	100.2	2.8	20
Gold									
Iron									
Lead	anr								
Lithium									
Magnesium									
Manganese									
Molybdenum									
Nickel	509	500	101.8	80-120	512	500	102.4	0.6	20
Palladium									
Platinum									
Potassium									
Selenium	anr								
Silicon									
Silver									
Sodium									
Sulfur									
Strontium									
Thallium									
Tin									
Titanium									
Tungsten									
					Page 1				

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC38997 Account: FDG - CB&I

Project: NRG Montville Lathrop Rd. Uncasville, CT

QC Batch ID: MP24674 Matrix Type: AQUEOUS

Units: ug/l

Methods: SW846 6010C

06/02/15

Prep Date: 06/02/15

Metal	BSP Result	Spikelot MPICP7	: % Rec	QC Limits	BSD Result	Spikelot MPICP7	% Rec	BSD RPD	QC Limit
Vanadium	498	500	99.6	80-120	510	500	102.0	2.4	20
Zinc	500	500	100.0	80-120	503	500	100.6	0.6	20
Zirconium									

Associated samples MP24674: MC38997-1, MC38997-2, MC38997-3, MC38997-4, MC38997-5, MC38997-6, MC38997-7, MC38997-8, MC38997-10

Results < IDL are shown as zero for calculation purposes (*) Outside of QC limits (anr) Analyte not requested



SERIAL DILUTION RESULTS SUMMARY

Login Number: MC38997 Account: FDG - CB&I

Project: NRG Montville Lathrop Rd. Uncasville, CT

QC Batch ID: MP24674 Methods: SW846 6010C Matrix Type: AQUEOUS Units: $\mbox{ug/l}$

Prep Date: 06/02/15

Metal	MC38998- Original	2 SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	0.600	0.00	100.0(a)	0-10
Bismuth				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	29.2	28.1	3.8	0-10
Gold				
Iron				
Lead	anr			
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	28.7	28.5	0.7	0-10
Palladium				
Platinum				
Potassium				
Selenium	anr			
Silicon				
Silver				
Sodium				
Sulfur				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				

Page 1

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC38997 Account: FDG - CB&I

Project: NRG Montville Lathrop Rd. Uncasville, CT

QC Batch ID: MP24674 Methods: SW846 6010C Matrix Type: AQUEOUS Units: $\mbox{ug/l}$

Prep Date: 06/02/15

Associated samples MP24674: MC38997-1, MC38997-2, MC38997-3, MC38997-4, MC38997-5, MC38997-6, MC38997-7, MC38997-8, MC38997-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits
(anr) Analyte not requested

Zirconium

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).



BLANK RESULTS SUMMARY Part 2 - Method Blanks

Login Number: MC38997 Account: FDG - CB&I

Project: NRG Montville Lathrop Rd. Uncasville, CT

QC Batch ID: MP24681 Methods: SW846 6020A Matrix Type: AQUEOUS Units: ug/l

Prep Date: 06/04/15 06/04/15

Metal	RL	IDL	MDL	MB raw	final	MB raw	final
Aluminum	50	1.3	4.4				
Antimony	1.0	.022	.058				
Arsenic	1.0	.046	.42	0.48	<1.0	0.46	<1.0
Barium	2.0	.016	.076				
Beryllium	1.0	.015	.042	-0.0048	<1.0	-0.010	<1.0
Boron	10	.24	.34				
Cadmium	1.0	.012	.026				
Calcium	500	4.2	30				
Chromium	2.0	.032	.42				
Cobalt	1.0	.0064	.028				
Copper	2.0	.017	1	0.098	<2.0	0.59	<2.0
Iron	50	.72	3.4				
Lead	1.0	.013	.036				
Magnesium	500	1.4	2				
Manganese	4.0	.0096	1.2				
Molybdenum	2.0	.028	.24				
Nickel	2.0	.015	.14	-0.011	<2.0	-0.00071	<2.0
Potassium	500	3.4	5.2				
Selenium	2.0	.15	.3				
Silver	1.0	.0088	.022				
Sodium	500	2	8.8				
Strontium	10	.01	.026				
Thallium	1.0	.042	.068				
Tin	10	.015	.048				
Titanium	2.0	.2	.26				
Vanadium	8.0	.2	1.4	2.2	<8.0	2.1	<8.0
Zinc	8.0	.066	2	1.2	<8.0	0.79	<8.0

Associated samples MP24681: MC38997-9

Results < IDL are shown as zero for calculation purposes (*) Outside of QC limits (anr) Analyte not requested



SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC38997

Account: FDG - CB&I

Project: NRG Montville Lathrop Rd. Uncasville, CT

QC Batch ID: MP24681 Methods: SW846 6020A Matrix Type: AQUEOUS Units: $\mbox{ug/l}$

Prep Date:			06/04/15		06/04/15				
Metal	BSP Result	Spikelot MPICP7	% Rec	QC Limits	BSD Result	Spikelot MPICP7	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony									
Arsenic	558	500	111.6	80-120	540	500	108.0	3.3	
Barium									
Beryllium	503	500	100.6	80-120	495	500	99.0	1.6	
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	505	500	101.0	80-120	488	500	97.6	3.4	
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	507	500	101.4	80-120	491	500	98.2	3.2	
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	513	500	102.6	80-120	497	500	99.4	3.2	
Zinc	559	500	111.8	80-120	537	500	107.4	4.0	

Associated samples MP24681: MC38997-9

Results < IDL are shown as zero for calculation purposes (*) Outside of QC limits

(*) Outside of QC limits (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC38997 Account: FDG - CB&I

Project: NRG Montville Lathrop Rd. Uncasville, CT

QC Batch ID: MP24681 Methods: SW846 6020A Matrix Type: AQUEOUS Units: $\mbox{ug/l}$

Prep Date: 06/04/15

Metal	MC39061- Original	1 SDL 2:10	%DIF	QC Limits	
Aluminum					
Antimony					
Arsenic	1.94	2.34	20.5 (a)	0-10	
Barium					
Beryllium	0.00	0.00	NC	0-10	
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt					
Copper	8.73	9.28	6.2	0-10	
Iron	anr				
Lead	anr				
Magnesium					
Manganese	anr				
Molybdenum					
Nickel	2.33	2.32	0.7	0-10	
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium	4.25	5.54	30.1 (a)	0-10	
Zinc	139	158	13.1 (b)	0-10	

Associated samples MP24681: MC38997-9

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.



Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: AOC12-MW306 Lab Sample ID:

MC38997-2

Date Sampled:

05/27/15 05/29/15

Matrix:

AQ - Ground Water

Date Received: Percent Solids: n/a

Project:

NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	68.6		1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	1.2 B 🍑	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Copper	2.4 U	25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Nickel	22.6 B J	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Vanadium	55.6	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Zinc	68.7	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177 (2) Prep QC Batch: MP24674

RL = Reporting Limit MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL



Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: AOC12-MW306(DUP)

Lab Sample ID:

MC38997-3

AQ - Ground Water

Date Sampled: 05/27/15 Date Received: 05/29/15

Percent Solids: n/a

Project:

Matrix:

NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	70.0	4.0	1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	1.1 B J	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper	2.4 U		2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Nickel	22.7 B J	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Vanadium	59.1	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Zinc	69.8	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177

(2) Prep QC Batch: MP24674



Lab Sample ID:

Client Sample ID: AOC12-MW301 MC38997-4

Matrix:

AQ - Ground Water

Date Sampled: 05/27/15

Percent Solids: n/a

Date Received: 05/29/15

Project:

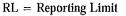
NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	2.9 B J	4.0	1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	0.60 B J	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper	3.7 B J	25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Nickel	15.0 B J	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Vanadium	3.9 B J	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Zinc	24.8 L	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177

(2) Prep QC Batch: MP24674



MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL



Client Sample ID: AOC12-MW305 Lab Sample ID: MC38997-6 Matrix:

AQ - Ground Water

Date Sampled: 05/27/15 Date Received: 05/29/15 Percent Solids: n/a

Project:

NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	27.5	4.0	1.7	ug/i	1	06/02/15	06/05/15 EAL	SW846 6010C ²	SW846 3010A ³
Beryllium	0.25 U	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ³
Copper	2.4 U	25	2.4	ug/I	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ³
Nickel	2.0 B J	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ³
Vanadium	0.51 U	10	0.51	ug/i	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ³
Zinc	12.7 B (L 20	1.0	ug/I	1		06/03/15 EAL	SW846 6010C 1	SW846 3010A ³

(1) Instrument QC Batch: MA18177 (2) Instrument QC Batch: MA18183 (3) Prep QC Batch: MP24674

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: AOC3-SB4/MW2 Lab Sample ID:

MC38997-7

Date Sampled: 05/27/15

Matrix:

AQ - Ground Water

Date Received: 05/29/15 Percent Solids: n/a

Project:

NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.6		1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	0.25 U	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper	2.4 U	25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Nickel	1.5 B J	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Vanadium	0.60 B J	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Zinc	11.7B (L 20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177

(2) Prep QC Batch: MP24674



Client Sample ID: NRG-MW7 Lab Sample ID:

MC38997-8

Matrix:

AQ - Ground Water

Date Sampled: 05/28/15

05/29/15

Date Received: Percent Solids: n/a

Project:

NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	18.0	4.0	1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	0.25 U	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Copper	2.4 U	25	2.4	ug/I	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Nickel	13.9 B J	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Vanadium	0.60 B ゴ	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Zinc	94.1	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18177

(2) Prep QC Batch: MP24674



U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL



Client Sample ID: NRG-MW5

Lab Sample ID: MC38997-9

Matrix:

AQ - Ground Water

Date Sampled: 05/28/15 Date Received: 05/29/15

Percent Solids: n/a

Project:

NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.3	1.0	0.42	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²
Beryllium	0.083 B	J 1.0	0.042	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²
Соррег	1.0 U	·7 (.15	1.0	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²
Nickel	9.4		0.14	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²
Vanadium	5.9 B J	8.0	1.4	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²
Zinc	18.0 U	8.0	2.0	ug/l	2	06/04/15	06/05/15 VY	SW846 6020A ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18185

(2) Prep QC Batch: MP24681



Report of Analysis

Client Sample ID: NRG-MW3

Lab Sample ID: MC38997-10 Matrix:

AQ - Ground Water

Date Sampled: 05/28/15 Date Received: 05/29/15

Percent Solids: n/a

Project:

NRG Montville Lathrop Rd. Uncasville, CT

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.6	4.0	1.7	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Beryllium	0.70 B J	4.0	0.25	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Copper		25	2.4	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²
Nickel	27.9 B J	40	0.50	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C I	SW846 3010A ²
Vanadium	66.3	10	0.51	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C 1	SW846 3010A ²
Zinc	49.4	20	1.0	ug/l	1	06/02/15	06/03/15 EAL	SW846 6010C ¹	SW846 3010A ²

⁽¹⁾ Instrument QC Batch: MA18177

⁽²⁾ Prep QC Batch: MP24674